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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 603,025	06 26 2000	Laurence Bigio	LD 11411 GEC 2 0489	3395

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EXAMINER

ROY, SIKHA

ART UNIT PAPER NUMBER

2879

DATE MAILED: 10 04 2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603,025

Applicant(s)

BIGIO ET AL.

Examiner

Sikha Roy

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

Attachments

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement (PTO-1449) (Page 1)
- 4) ☐ Interview Summary (PTO-413) (Page 1)
- 5) ☐ Notice of Informal Patent Application (PTO-152)

DETAILED ACTION

The Amendment, filed on August 1, 2002, has been entered and is acknowledged by the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-9,10-12,14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,506,471 to Kosmatka et al. in view of U. S. Patent 5,017,839 to Arlt et al.

Referring to claims 1 and 10 Kosmatka et al. disclose (column 2 lines 65-67, column 3 lines 1-37 Fig. 1) a light source A comprising a double-ended lamp envelope 10 made of a light transmissive material, wherein the envelope has an ellipsoidal portion disposed centrally between two tubular portions disposed on opposite ends of the ellipsoidal portion, a filament 22 centrally disposed within the envelope, an infrared reflective coating 44 disposed on a portion of the envelope in surrounding relation to the filament.

Claims 1 and 10 differ from Kosmatka et al. in that Kosmatka et al. do not surrounding relation to the filament

Arlt et al. in relevant art of discharge lamp disclose (column 2 lines 13-16 column 3 lines 27-30 Fig.1) a reflective coating 8 at the end portions 7 of the envelope which reflects non-visible radiation transmitting only visible radiation. Arlt et al. further disclose (column 4 lines 4,5) providing coating substantially improves the light output characteristics of the lamp.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include the reflecting coating on end portion of the envelope of Auyang as suggested by Arlt et al. for improving the light output characteristics of the lamp.

Regarding claims 2 and 3 Kosmatka et al. disclose (column 3 lines 15-25) a pair of lead wires 28,30 connected to opposite ends of the filament.

Referring to claims 5 and 14 Kosmatka et al. disclose (column 3 lines 30-36) infrared reflecting coating includes multiple layers of refractory metal oxides having alternate high and low refractive indices. The recitation 'for selectively passing desired radiation through and reflecting unwanted radiation to the filament' has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ 2d 1647 (1987).

Regarding claim 6 and 15 Kosmatka et al. discloses (column 3 lines 34,35) the coating reflects infrared portion of the emitted radiation.

Regarding claim 7 and 16 Arlt et al. disclose (column 9 lines 40-43) the coating on the end portions of the discharge vessel reflecting visible and invisible radiation back towards the filament.

Regarding claims 8 and 9 Arlt et al. disclose (column 3 lines 31-35 Fig.1) the lateral axis of the lamp and a connection line between the center of the discharge vessel and the inner edge of the coating forms an angle between 50° and 55° and hence the edge of the coating subtends an angle preferably between 40° ($90^{\circ}-50^{\circ}$) and 35° ($90^{\circ}-55^{\circ}$) from the axis aligned with the filament.

Regarding claims 11, 12 and 19 Arlt et al. disclose (Fig.1) the reflecting coating 8 is provided on the end portions and the tubular portions (region of transition from the discharge vessel to the press seals 3) extending from the opposite ends of ellipsoidal portion of the lamp.

Claims 17 and 18 recite essentially the same limitations as of claims 8 and 9 and hence are rejected for the same reason.

Referring to claim 20 Kosmatka et al. disclose (column 4 line 65, Fig. 5) the lamp mounted within a reflector 70 receiving light from the light source.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,506,471 to Kosmatka et al. and U. S. Patent 5,017,839 to Arlt et al. in view of U. s. Patent 4,375,605 to Fontana et al.

Regarding claim 4 and 13 Kosmatka and Arlt do not disclose the length of the

Fontana et al. in analogous art of ellipsoidal envelope of an incandescent lamp disclose(column 6 lines 11-15) the filament mounted along the major axis and its length fitting within the two foci of the major axis of the envelope. Fontana et al. further disclose (column 5 lines 28-40) that because of this design, a substantial portion of the reflected radiation reaches and hence increases the temperature of the filament producing a greater lumen output.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the length of the filament of Kosmatka and Arlt et al. so that it fits between the first and second optical foci of the ellipsoidal portion of the envelope as suggested by Fontana et al. for reflecting a substantial portion of the radiation on the filament and increasing its temperature and thus producing a greater lumen output.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art references are cited to further show the

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U. S. Patent 5,670,840 to Lanese et al.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (703) 308-2826. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

SR
Sikha Roy
Patent Examiner
Art Unit 2879

ASHOK PATEL
PRIMARY EXAMINER